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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,525	01/24/2002	Robert Marc Clement	7500.376US01	2322
23552	7590	12/29/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			CORCORAN, GLADYS J PIAZZA	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/057,525

Applicant(s)

CLEMENT ET AL.

Examiner

Gladys J Piazza Corcoran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 16-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152).
- 6) ☐ Other: _____.

FINAL ACTION

Election/Restrictions

1. Claims 16-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on April 16, 2004.
2. This application contains claims 16-23 drawn to an invention nonelected with traverse in the paper filed on April 16, 2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites "wherein little to no curing of the adhesive bonding material occurs during the heating in the dispensing device stage". There is no support in the original Specification for "little to no curing" during the heating in the dispensing device.

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The passages that Applicant provides for support in the original Specification do not sufficiently describe in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of "little to no curing" in the heating stage.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 1 is unclear by reciting "wherein little to no curing of the adhesive bonding material occurs during the heating in the dispensing device stage". Since the limitations were not described in the original specification, it is unclear what Applicant intends the scope of the claim to entail with "little to no curing", i.e. how much curing is "little".

8. Claim 1 recites the limitation "the heating in the dispensing device stage" in line 10. There is insufficient antecedent basis for this limitation in the claim. It is suggested to amend to --the period of heating in the dispensing device--.

9. Claim 5 recites the limitation "the desired temperature" in line 4. There is insufficient antecedent basis for this limitation in the claim. It is suggested to amend to -the predetermined level--.

10. Claim 7 is unclear by reciting "a minor degree of curing of the adhesive bonding material occurs during the heating in the dispensing device" when claim 1 requires that

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"little to no curing" occurs during the heating in the dispensing device. It is unclear how both limitations can occur simultaneously.

11. Claim 7 recites the limitation "the heating in the dispensing device stage" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. It is suggested to amend to --the period of heating in the dispensing device--.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 1-7, 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tschan et al. (US Patent No. 4,778,845) in view of the Admitted Prior Art, Kunert (US Patent No. 4,910,071), and/or Swanson et al. (US Patent No. 6,054,001).

As to the newly added limitation that the device includes a heater arrangement for heating the adhesive bonding material in the dispensing device, Tschan discloses that the dispensing tube is heated, therefore a heater arrangement is considered to be included. Additionally, such would have been obvious to one of ordinary skill in the art that a heater arrangement is provided in order to heat the tube.

As to the newly added limitation that the adhesive bonding material is dispensed via a nozzle of the device, as discussed below in view of the Admitted Prior Art, Kunert, and/or Swanson et al., it is well known to apply adhesive bonding material along peripheries of glazing panels for mounting onto automobiles by using hand-held operator manipulative device with a nozzle.

As to the newly added limitation that little to no curing of the adhesive bonding material occurs during the heating in the dispensing device stage, these limitations are considered new matter as discussed above. Regardless, Tschan discloses that the adhesive is "only partial" curing is possible during the heating therefore this is considered to read on "little" curing in the heating period. Additionally, one of ordinary skill in the art would readily appreciate that the amount of curing during the heating period is dependent only upon the particular materials and hardeners in the adhesive and would be motivated to provide an adhesive that does not cure during the heating stage in order to provide curing while on the panel only. Finally, it is noted that the adhesive and the temperature ranges in Tschan are the same as disclosed by Applicants, consequently, it is considered that the same curing pattern would result for both processes.

Tschan discloses a method of securing a panel with an adhesive bonding material (column 4, lines 21-23), by subjecting the bonding material to a predetermined temperature regime having a period of heating the bonding material at a predetermined level prior to dispensing from the dispensing outlet of the device (column 4, lines 12-20) and a subsequent period of curing in-situ in contact with the glazing panel at a temperature significantly below the predetermined heating temperature level (column 3, lines 5-15). As to the limitation that the temperature of the adhesive bonding material dispensed via the dispensing outlet is maintained substantially uniform as adhesive is dispensed about the periphery of the panel, Tschan discloses the adhesive material is dispensed in a hot state and one of ordinary skill in the art the time of the invention would readily recognize that the adhesive is applied at a substantially uniform temperature. Additionally, it is considered conventional to apply the adhesive material around a periphery of the panel when mounting and or bonding windows to automobile vehicles.

As to the limitation of using a hand-held operator manipulative dispensing device to dispense the adhesive bonding material via a dispensing outlet of the device, it is considered conventional to apply the adhesive bonding material along peripheries of glazing panels for mounting onto automobiles by using hand-held operator manipulative devices with nozzles. For example, it appears (although not clearly) as though the Admitted Prior Art discloses it is known at least in repair shops (Specification page 1-3). Kunert also discloses it is known in the art to provide polyurethane adhesive masses about the periphery of window panels with an extrusion nozzle by hand (column 3, lines

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19-24). Swanson also discloses that it is known in the art to apply moisture cured urethane adhesives around the periphery of window panels by hand (column 1, lines 27-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the adhesive material in Tschan with a hand-held operator manipulative device with a nozzle as is considered well known in the art in order to apply the adhesive material around the periphery of the glazing panels in the automotive art and as further exemplified by the Admitted Prior Art, Kunert and/or Swanson.

As to claim 2, the adhesive bonding material is a moisture cure adhesive bonding material (column 3, lines 13-16; column 4, lines 10-11). As to claims 3 and 4, the predetermined level to which the adhesive bonding material is heated prior to dispensing is at or above 50°C and in the range of 70°C \pm 20°C (column 3, lines 9-10, and 61-63). As to claim 5, as discussed above, it would have been well within the skill of one of ordinary skill in the art at the time of the invention to apply the adhesive a uniform temperature within 5 degrees of the desired temperature during the dispensing of the adhesive, only the expected results would be attained. As to claim 6, while Tschan does not specifically disclose at what temperature the adhesive is dispensed, Tschan does disclose that the adhesive is heated to a temperature within the range of 70°C \pm 20°C (column 3, lines 9-10) and that the adhesive is applied hot (column 4, lines 12-20). It would have been obvious to one of ordinary skill in the art at the time of the invention to dispense the adhesive in Tschan at a temperature within the range of 70°C \pm 20°C since that is the same range of temperatures the adhesive is heated to and the

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adhesive is applied directly after heating, therefore one of ordinary skill in the art would readily appreciate that the dispensing temperature would be substantially similar to the temperature at which it was heated to prior to dispensing. As to claim 7, Tschan discloses that a minor degree of curing occurs during the heating stage in the applicator (the heatable tube is considered part of the applicator; column 3, lines 9-11; column 4, lines 17-19). As to claim 14, after the heating and dispensing of the adhesive in Tschan, the adhesive is permitted to fully cure in situ with moisture (column 4, lines 10-11). While Tschan does not specifically disclose that the moisture cure is in ambient conditions, it is considered well known in the art to moisture-cure sealants on panels in ambient conditions. As to claim 15, Tschan discloses carrying out the heating stage prior to dispensing, therefore the heating stage is considered to be carried out prior to positioning the panel and adhesive bonding material for securing (it is noted it is also considered conventional to apply the adhesive to the panel while lying flat and then move the panel onto the automobile frame for mounting).

15. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tschan et al. in view of the Admitted Prior Art, Kunert, and/or Swanson et al. as applied to claim 1 above, and further in view of Landrock (Adhesives Technology Handbook).

Tschan discloses that the adhesive is heated by passing through a heatable hose, however does not specifically disclose the type or method of heating the adhesive. It is considered well known in the adhesive arts to heat adhesives by a variety of methods including bulk techniques that utilize electromagnetic radiation, dielectric radiation, microwave radiation, radio frequency radiation, or ultrasonic

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radiation. Landrock discloses examples of methods for providing heat to adhesives for curing including, radiation curing, dielectric (radio frequency heating), or ultrasonic activation (p. 214-219). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of securing a panel as shown by Tschan in view of the Admitted Prior Art, Kunert, and/or Swanson by heating the adhesive with a well known and conventional method such as bulk techniques that utilize electromagnetic radiation, dielectric radiation, microwave radiation, radio frequency radiation, or ultrasonic radiation as further exemplified by Landrock.

16. Claims 8, 10, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tschan et al. in view of the Admitted Prior Art, Kunert, and/or Swanson et al. as applied to claim 1 above, and further in view of Hill et al. (US Patent No. 5,948,194) and/or Duck et al. (US Patent No. 5,064,494).

Tschan discloses that the adhesive is heated by passing through a heatable hose, however does not specifically disclose the type or method of heating the adhesive. It is considered well known in the adhesive arts to heat adhesives by a variety of methods including bulk techniques that utilize electromagnetic radiation such as microwave radiation. For example, Hill discloses a method of pre-heating an adhesive prior to application to a panel where the adhesive is pre-heated with a microwave pre-heater (column 4, lines 48-55). Duck also discloses an example of heating an adhesive prior to applying to a panel where the adhesive is heated as it moves through a tube with microwave energy (column 7, lines 11-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the

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method of securing a panel as shown by Tschan in view of the Admitted Prior Art, Kunert, and/or Swanson by heating the adhesive with a well known and conventional method such as bulk techniques that utilize electromagnetic radiation such as microwave radiation as further exemplified by Hill and/or Duck.

Response to Arguments

17. Applicant's arguments filed November 29, 2004 have been fully considered but they are not persuasive.

Applicant argues on page 7 that the significant curing in Tschan occurs in the heatable hose when the material is in a hot state and fails to teach little to no curing of the adhesive material occurs during the heating in the dispensing device. Applicant is mischaracterizing the reference Tschan. Tschan discloses that only a partial curing occurs during the heating in the tubes, consequently this reads on "little" curing during the heating period. It is further noted that such limitations are considered new matter as discussed above.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys J Piazza Corcoran whose telephone number is (571) 272-1214. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gladys J. Corcoran
Primary Examiner
Art Unit 1733

GJPC